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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,223	09/30/2003	Michael P. Boutillette	BSME120587	9880
26389	7590	12/26/2007		
CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC			EXAMINER	
1420 FIFTH AVENUE			NGUYEN, HUONG Q	
SUITE 2800				
SEATTLE, WA 98101-2347			ART UNIT	PAPER NUMBER
			3736	
			MAIL DATE	DELIVERY MODE
			12/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/675,223

Applicant(s)

BOUTILLETTE ET AL.

Examiner

Helen Nguyen

Art Unit

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-6,10 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,10 and 20-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

1. This Office Action is responsive to the RCE filed 10/31/2007. Claims 1, 4, 10, and 20 are amended. Claim 11 is cancelled. Claims 21-24 are new. **Claims 1, 4-6, 10, and 20-24** remain pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 4-6, 21, and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Loney et al (US Pat No. 5137517) in view of Hedger (US Pat No. 4057186).

4. In regards to **Claim 1**, Loney et al disclose a device for applying torque to a wire, comprising:

a body portion (10) having an open channel, best seen in Figure 1 and 2c-d, referred to as "longitudinal slot" (12), with a bottom surface and an opening that extends along an entire length of the body portion, best shown in Figure 2, for allowing the wire to be side-loaded into the channel, best seen in Figure 4 A-B;

a slider (16) that is longitudinally slideable within the channel of the body portion, the slider having an end that forms an engagement surface, referred to as "bottom surface" (48), that receives a wire (14) when the wire is side-loaded in the channel and compresses the wire

between a first engagement surface (38) and the second engagement surface (48) from movement of the slider in the channel of the body portion so that rotation of the body portion applies torque to the wire (Col.5: 21-38).

5. However, Loney et al do not disclose the first engagement surface is a tongue positioned above the bottom surface of the channel that allows the wire to be compressed between said first engagement surface and the second engagement surface of the slider.

6. Hedger discloses an analogous device comprising a tongue (19) supported in a channel (15), best seen in Figures 4 and 7 (Col.2: 12-15), including a first engagement surface or the "upper-surface of the tongue" (Col.2: 43-46) positioned above a bottom surface of the channel, best seen in Figures 4 and 7. Hedger also discloses a slider (16) having an end, defined as the right side of said slider (16) and tongue (19) interface best seen in Figure 7b right side, that forms a second engagement surface or "under-surface of the slider" (Col.2: 43-46) that receives a wire (23) that is inserted in the channel and compresses the wire against the first engagement surface of the tongue (upper-surface of the tongue) as the slider is moved within the channel as an effective gripping mechanism. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify gripping mechanism of Loney et al such that a tongue is supported in the channel having a first engagement surface and such that the wire is compressed between the first engagement surface of the tongue and the second engagement surface from movement of the slider within the channel of the body portion, as taught by Hedger, so that rotation of the body portion applies torque to the wire as an effective mechanism to do so.

7. In regards to **Claim 4**, Loney et al in combination with Hedger disclose the end of the slider and the tongue, as described above, including angled cooperating surfaces (Loney Col.5: 21-33), as best seen in Figures 2-3.

8. In regard to **Claims 5-6**, Loney et al disclose the body portion (10) has a grip enhancing mechanism in the form of one or more ridges (25,26,28,30,32,34,36) on the exterior of the body portion (Col.3: 19-26), best seen in Figures 1-2.

9. In regards to **Claim 21**, Loney et al in combination with Hedger disclose the tongue is defined by the body portion.

10. In regards to **Claim 23**, Loney et al disclose the open ended channel 12 of the body is U-shaped, best seen in Figure 2.

11. **Claims 10 and 24** are rejected under 35 U.S.C. 102(b) as being anticipated by Loney et al in view of Hedger, further in view of Sherts et al (US Pat No. 6533772).

12. In regards to **Claim 10**, Loney et al disclose a wire torquing device comprising:

a body (10) having an open U-shaped channel (12) extending along an entire length thereof in which a wire (14) can be fitted, best seen in Figures 1-2;

a slider (16) that remains in the U-shaped channel as a wire is fitted along the length of the channel (Col.6: 1-7) best seen in Figures 4a-b and is movable longitudinally within the U-

shaped channel, the slider including an engagement surface (38) (Col.3: 57-64) that secures the wire as the slider is moved longitudinally in the channel.

13. However, Loney et al do not disclose the slider includes an open ended channel and a close end that forms the engagement surface. Hedger discloses an analogous device comprising a slider (16) including an open ended channel, referred to as "hole" (20) (Col.2, line 12-15), and a closed end, defined as the right portion of the slider (16) when interfaced with tongue (19) that forms an engagement surface or "under-surface of the slider" (Col.2: 25) best seen in Figure 7 right side, wherein the open ended channel of the slider receives a portion of a wire when fitted in a channel (15) of the body, and wherein the engagement surface of the slider secures the wire as the slider is moved longitudinally in the channel, best seen in Figure 7A-C. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Loney et al such that the slider includes an open ended channel and a closed end to form the engagement surface in the manner above as taught by Hedger, as an effective means to grip a wire inserted into the channel for an improved device.

14. However, Loney et al and Hedger do not disclose the slider is U-shaped. Sherts et al disclose a U-shaped slider (106) best seen in Figure 12a-c effectively shaped so to conform to the natural contour of a user's finger for ease of use. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the slider of Loney et al as modified by Hedger to be U-shaped as taught by Sherts et al to more effectively conform to the user's finger for ease of use.

15. In regards to **Claim 24**, Hedger discloses a tongue (19) disposed in the U-shaped channel of Loney et al, wherein the tongue cooperates with the engagement surface on the slider to secure the wire in a fixed position, best seen in Hedger Figure 7A-C.

16. **Claim 20** is rejected under 35 U.S.C. 103(a) as being unpatentable over Loney et al in view of Sherts et al.

17. Loney et al disclose a wire torquing device comprising:

a body (10) having an open U-shaped channel (12) extending along an entire length thereof in which a wire (14) can be fitted, best seen in Figures 1-2;

a slider (16) that is movable longitudinally within the channel;

18. wherein the open U-shaped channel (12) includes a pair of sidewalls and a bottom surface. However, Loney et al do not disclose said channel including a fixed wedge positioned on one of the side walls of the channel and the slider includes an engagement surface facing the wedge, the slider longitudinally movable towards the wedge to pinch the wire against the wedge.

19. Sherts et al disclose an analogous device comprising a channel (100b) including a wedge (104) fixed in the vertical direction and positioned on a side wall of the channel as well as a slider (106) with an engagement surface (106a) facing the wedge, the slider longitudinally movable towards the wedge to pinch a wire against the wedge, best seen in Figures 12b-c (Col.10: 4-17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the U-shaped channel of Loney et al to include a fixed wedge positioned on one of the side walls and the slider includes an engagement surface facing

the wedge that is longitudinally movable towards the wedge as taught by Sherts et al to effectively pinch a wire against the wedge.

20. **Claim 22** is rejected under 35 U.S.C. 103(a) as being unpatentable over Loney et al in view of Hedger, further in view of Sherts et al.

21. Loney et al in combination with Hedger disclose the invention above including the slider with an open ended channel, and wherein the first engagement surface of the slider forms a portion of the open ended channel of the slider, the open ended channel of the slider receiving the wire when the wire is side loaded in the channel of the body portion as explained above.

However, Loney et al in combination with Hedger do not disclose the slider is U-shaped. Sherts et al disclose a U-shaped slider (106) best seen in Figure 12a-c effectively shaped so to conform to the natural contour of a user's finger for ease of use. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the slider of Loney et al as modified by Hedger to be U-shaped as taught by Sherts et al to more effectively conform to the user's finger for ease of use.

Response to Arguments

22. Applicant's arguments with respect to **Claims 1, 4-6, 10, and 21-24** have been considered but are moot in view of the new ground(s) of rejection.

23. Applicant's arguments regarding Sherts et al have been fully considered but they are not persuasive. Applicant contends that Sherts et al do not disclose a U-shaped slider. However, it is noted that Sherts et al do indeed disclose at least a portion of slider (106) as U-shaped, in

particular the top portion for engagement with a user's finger best seen in Figure 12a-c, effectively shaped so to conform to the natural contour of a user's finger for ease of use. For example, Claim 10 does not recite the open ended channel portion of the slider is U-shaped.

24. Regarding Applicant's arguments that the combination of Loney et al and Hedger will not allow the wire to be side-loaded, it is noted that since Loney et al already disclose the wire being side loaded, one of ordinary skill in the art would know how to make and modify the invention such that the teachings of Hedger may be incorporated while still allowing the wire to be side loaded. Furthermore, it is noted that for example Wilson et al (US Pat No. 6030349) disclose an analogous device with a slider 20 with an open ended channel 68 that would allow side loading of a wire, Best seen in Figure 3.

25. Applicant's arguments regarding **Claim 20** have been fully considered but they are not persuasive. Applicant contends that Sherts et al do not teach clamp pad 104 is a wedge and that the wire is not pinched between the wedge and the slider. However, it is noted that although Sherts et al do not explicitly refer to clamp pad 104 is a wedge, said clamp pad has a wedge structure of being smaller on top and larger on bottom, thick at one end and tapering at the other, and thus constitute a wedge. Furthermore, it is noted that Claim 20 does not recite the wire pinched between the wedge and the slider, only that the wire is pinched against the wedge, which Sherts et al clearly teach.

Conclusion

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen Nguyen whose telephone number is 571-272-8340. The examiner can normally be reached on Monday - Friday, 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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HQN
12/3/2007

A handwritten signature in black ink, appearing to be 'JW' or similar, written in a cursive style.A handwritten signature in black ink, appearing to be 'M. H. Hadenburg', written in a cursive style.